AMENDMENTS TO THE CLAIMS

1. (Currently amended) Apparatus for the generation of fluorine gas by the electrolysis of hydrogen fluoride, the apparatus comprising:

a plurality of individual fluorine generating cassettes; said individual fluorine generating cassettes being operably connected to a fluorine gas distribution system for the remote use and consumption of said fluorine gas; said fluorine generating cassettes being individually isolatable from said gas distribution system and removable from the apparatus for remote maintenance~~, as hereinbefore defined~~.

2- 23 (Previously canceled)

24. (Previously presented) The apparatus according to claim 1 wherein said fluorine generating cassettes are connectable to the apparatus by a valve mechanism for the isolation and disconnection of said fluorine generating cassettes from the apparatus.

25. (Currently amended) The apparatus according to claim 24 wherein said valve mechanism includes a double isolation valve having a space therebetween, said space being connectable to an extraction and scrubbing system.

26. (Previously presented) The apparatus according to claim 1 wherein the fluorine generating cassettes are installable within a common apparatus main enclosure.

27. (Previously presented) The apparatus according to claim 1 wherein all fluorine generating cassettes are substantially identical to each other.

28. (Previously presented) The apparatus according to claim 1 wherein said fluorine generating cassettes are provided with wheels.

29. (Previously presented) The apparatus according to claim 1 wherein each fluorine generating cassette is provided with an enclosure.

30. (Previously presented) The apparatus according to claim 26 wherein said main enclosure is connectable to extraction equipment and to a scrubbing system.

31. (Previously presented) The apparatus according to claim 29 wherein each fluorine generating cassette enclosure is connectable to extraction equipment and to a scrubbing system.

32. (Previously presented) The apparatus according to claim 29 wherein a fluorine generating cell within said fluorine generating cassette is fixed to said enclosure such that said enclosure provides a cathode connection to said cell.

33. (Previously presented) The apparatus according to claim 32 wherein said enclosure includes a framework having panelling.

34. (Previously presented) The apparatus according to claim 32 wherein said cathode connection is at 0 volts relative to earth.

35. (Previously presented) The apparatus according to claim 1 further comprising at least one fluorine purification cassette through which the fluorine output of said fluorine generating cassettes is passed.

36. (Previously presented) The apparatus according to claim 35 further comprising at least one fluorine buffer cassette connected in a fluorine line downstream of said at least one fluorine purification cassette.

37. (Previously presented) The apparatus according to claim 36 wherein said buffer cassette holds compressed fluorine.

38. (Previously presented) The apparatus according to claim 1 further including purging means to remove potentially reactive fluids from piping before fluorine is introduced thereinto.

39. (Previously presented) The apparatus according to claim 1 wherein the apparatus is transportable as a unit by land or sea.

40. (Previously presented) The apparatus according to claim 39 wherein the overall size of the apparatus is at most that of a standard ISO container.

41. (Previously presented) The apparatus according to claim 1 wherein each of said individual fluorine generating cassettes are further provided with a power supply unit at least for electrolysis, fluorine purification, fluorine compression and a fluorine storage tank/buffer.

42. (Previously presented) A method for the operation and maintenance of an apparatus for producing fluorine by the electrolysis of hydrogen fluoride, the method comprising the steps of: providing a plurality of fluorine generating cassettes operably connected to a fluorine gas distribution system for the remote use and consumption of the fluorine;

isolating any individual fluorine generating cassettes from the fluorine gas distribution system and from each other; and

disconnecting and removing the isolated fluorine generating cassette from the apparatus without interruption of supply of fluorine from remaining fluorine generating cassettes.

43. (Previously presented) The method according to claim 42 further comprises the step of providing the fluorine generating cassettes with sufficient fluorine generating capacity such that a total demand for fluorine may be met by less than the total number of fluorine generating cassettes within said apparatus.

44. (Previously presented) The method according to either claim 42 further comprises the step of removing an individual fluorine generating cassette from the apparatus and taking said cassette to a remote site for maintenance while still maintaining fluorine output to meet demand.

45. (Previously presented) The method according to claim 42 further comprising the step of providing each individual fluorine generating cassette with a power supply at least for electrolysis, fluorine purification, fluorine compression and a fluorine storage tank/buffer.